

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

INTELLECTUAL VENTURES I, LLC and)
INTELLECTUAL VENTURES II, LLC,)
Plaintiffs,)
v.) Civ. No. 11-908-SLR
MOTOROLA MOBILITY, LLC,)
Defendant.)

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MEMORANDUM OPINION

Dated: October 28, 2014
Wilmington, Delaware


ROBINSON, District Judge

I. INTRODUCTION

Plaintiff Intellectual Ventures I, LLC (“IV I”) and Intellectual Ventures II, LLC (“IV II”) (collectively “IV”) brought this patent infringement action against defendant Motorola Mobility, Inc. (“Motorola”) on October 6, 2011, alleging infringement of six patents: U.S. Patent Nos. 7,810,144 (“the ‘144 patent”), 6,412,953 (“the ‘953 patent”), 7,409,450 (“the ‘450 patent”), 7,120,462 (“the ‘462 patent”), 6,557,054 (“the ‘054 patent”), and 6,658,464 (“the ‘464 patent”). (D.I. 1) Motorola answered and asserted affirmative defenses of, *inter alia*, failure to state a claim, non-infringement, invalidity, prosecution history estoppel, the equitable doctrines of waiver, acquiescence, laches and unclean hands, and statutory time limitation on damages. (D.I. 10) Motorola also asserted counterclaims for non-infringement and invalidity. *Id.*

On August 20, 2013, Motorola filed a motion for summary judgment of invalidity (D.I. 230), and on September 10, 2013, Motorola filed a motion for summary judgment of non-infringement (D.I. 252). In a memorandum opinion and order dated January 2, 2014, the court issued its claim construction and resolved several summary judgment motions, finding no infringement of claim 26 of the ‘144 patent and invalidity of claim 1 of the ‘953 patent based on the asserted prior art. (D.I. 284) On January 8, 2014, the court limited trial to those issues related to the ‘462, ‘054 and ‘464 patents. (D.I. 288)

A nine-day jury trial was held on January 24 - February 4, 2014. The trial resulted in a hung jury and a mistrial was declared. Before the court is Motorola’s renewed Rule 50 motion for judgment as a matter of law (“JMOL”) on invalidity and non-infringement. (D.I. 320) The court has jurisdiction pursuant to 28 U.S.C. § 1338.

II. BACKGROUND

A. The Parties

IV I and IV II are limited liability companies organized and existing under the laws of the State of Delaware, with their principal place of business in Bellevue, Washington. (D.I. 1 at ¶¶ 1-2) IV I owns the '144, '450, '054, and '464 patents. (*Id.* at ¶¶ 10, 14, 18, 20) IV II is the exclusive licensee of the '953 patent and owns the '462 patent. (*Id.* at ¶¶ 12, 16)

Motorola is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Libertyville, Illinois. (*Id.* at ¶ 3) It makes, manufactures, and/or sells the accused products. (*Id.* at ¶ 28)

B. The Technology At Issue

The '462, '054 and '464 patents relate to a variety of technologies in information processing, computing and mobile phones. The '462 patent involves portable processor devices that provide communication and computing functionality. The '054 patent relates to computer-implemented methods for distributing software. The '464 patent describes software products for transferring data over a network. The court discusses each patent in more detail *infra*.

III. STANDARD

Judgment as a matter of law is proper “[i]f a party has been fully heard on an issue during a jury trial and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” Fed. R. Civ. P. 50(a). “A jury’s inability to reach a verdict does not necessarily preclude a judgment as

a matter of law.” *Shum v. Intel Corp.*, 633 F.3d 1067, 1076 (Fed. Cir. 2010) (citations omitted); see *Stewart v. Walbridge, Aldinger Co.*, 882 F. Supp. 1441, 1443 (D. Del. 1995) (“The fact that the jury was unable to reach a unanimous verdict does not in any way affect this Court’s duty to rule on the [rule 50] motion.”). “[T]he standard for granting summary judgment ‘mirrors’ the standard for judgment as a matter of law, such that ‘the inquiry under each is the same.’” *Reeves v. Sanderson Plumbing Products, Inc.*, 530 U.S. 133, 150 (2000) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 250-51 (1986)).

“[I]n entertaining a motion for judgment as a matter of law, the court should review all of the evidence in the record.” *Id.* “In doing so, however, the court must draw all reasonable inferences in favor of the nonmoving party, and it may not make any credibility determinations or weigh the evidence.” *Id.* (citations omitted). “The question is ‘whether the evidence, construed in the light most favorable to the non-moving party, permits only one reasonable conclusion.’” *Shum*, 633 F.3d at 1076 (citation omitted).

“A mere scintilla of evidence presented by the plaintiff is not sufficient to deny a motion for judgment as a matter of law.” *Stewart*, 882 F. Supp. at 1443. “The Court must determine not whether there is literally no evidence supporting the non-moving party, but whether there is evidence upon which the jury could properly find for the non-moving party.” *Id.* (citing *Walter v. Holiday Inns., Inc.*, 985 F.2d 1232, 1238 (3d Cir. 1993)). “The Court should grant the motion for judgment as a matter of law only if, ‘viewing all the evidence which has been tendered and should have been admitted in the light most favorable to the party opposing the motion, no jury could decide in that

party's favor.'" *Id.* (citation omitted)

IV. DISCUSSION

A. Standards

1. Infringement

A patent is infringed when a person "without authority makes, uses or sells any patented invention, within the United States . . . during the term of the patent." 35 U.S.C. § 271(a). To prove direct infringement, the patentee must establish, by a preponderance of the evidence, that one or more claims of the patent read on the accused device literally or under the doctrine of equivalents. See *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 261 F.3d 1329, 1336 (Fed. Cir. 2001). A two-step analysis is employed in making an infringement determination. See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995). First, the court must construe the asserted claims to ascertain their meaning and scope. See *id.* Construction of the claims is a question of law subject to de novo review. See *Cybor Corp. v. FAS Techs.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998). The trier of fact must then compare the properly construed claims with the accused infringing product. See *Markman*, 52 F.3d at 976. This second step is a question of fact. See *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998).

"Direct infringement requires a party to perform each and every step or element of a claimed method or product." *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1320 (Fed. Cir. 2009) (internal quotation marks omitted). "If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law."

Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1247 (Fed. Cir. 2000). If an accused product does not infringe an independent claim, it also does not infringe any claim depending thereon. *See Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1553 (Fed. Cir. 1989). However, “[o]ne may infringe an independent claim and not infringe a claim dependent on that claim.” *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007) (quoting *Wahpeton Canvas*, 870 F.2d at 1552) (internal quotations omitted). The patent owner has the burden of proving infringement and must meet its burden by a preponderance of the evidence. *See SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988) (citations omitted).

To establish indirect infringement, a patent owner has available two theories: active inducement of infringement and contributory infringement. See 35 U.S.C. § 271(b) & (c). To establish active inducement of infringement, a patent owner must show that an accused infringer “knew or should have known [their] actions would induce actual infringements.” *DSU Med. Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1306 (Fed. Cir. 2006). To establish contributory infringement, a patent owner must show that an accused infringer sells “a component of a patented machine ... knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use.” *Golden Blount, Inc. v. Robert H. Peterson Co.*, 365 F.3d 1054, 1061 (Fed. Cir. 2004) (quoting 35 U.S.C. § 271(c)). Liability under either theory, however, depends on the patent owner having first shown direct infringement. *Joy Technologies, Inc. v. Flakt*,

Inc., 6 F.3d 770, 774 (Fed. Cir. 1993).

2. Invalidity

a. Anticipation

Under 35 U.S.C. § 102(e),

a person shall be entitled to a patent unless an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent . . . or a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent.

A claim is anticipated only if each and every limitation as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631 (Fed. Cir. 1987). A single prior art reference may expressly anticipate a claim where the reference explicitly discloses each and every claim limitation. However, the prior art need not be *ipsissimis verbis* (i.e., use identical words as those recited in the claims) to be expressly anticipating. *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716 (Fed. Cir. 1984). A single prior art reference also may anticipate a claim where one of ordinary skill in the art would have understood each and every claim limitation to have been disclosed inherently in the reference. *Cont'l Can Co. USA Inc. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991). The Federal Circuit has explained that an inherent limitation is one that is necessarily present and not one that may be established by probabilities or possibilities. *Id.* That is, “the mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Id.* The Federal Circuit also has observed that “inherency operates to anticipate entire inventions as well

as single limitations within an invention.” *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1380 (Fed. Cir. 2003). Moreover, recognition of an inherent limitation by a person of ordinary skill in the art before the critical date is not required to establish inherent anticipation. *Id.* at 1377.

Even if the prior art discloses each and every limitation set forth in a claim, such disclosure will not suffice under 25 U.S.C. § 102 if it is not enabling. *In re Borst*, 345 F.2d 851, 855 (C.C.P.A. 1965). “Long ago our predecessor court recognized that a non-enabled disclosure cannot be anticipatory (because it is not truly prior art) if that disclosure fails to ‘enable one of skill in the art to reduce the disclosed invention to practice.’” *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1354 (Fed. Cir. 2003) (citations omitted). The patentee bears the burden to show that the prior art reference is not enabled and, therefore, disqualified as relevant prior art for an anticipation inquiry. *Id.* at 1355.

An anticipation inquiry involves two steps. First, the court must construe the claims of the patent in suit as a matter of law. *Key Pharm. v. Hercon Lab. Corp.*, 161 F.3d 709, 714 (Fed. Cir. 1998). Second, the finder of fact must compare the construed claims against the prior art to determine whether the prior art discloses the claimed invention. *Id.* The burden of proof rests on the party asserting invalidity and can be met only by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, – U.S. –, 131 S. Ct. 2238, 2242, 180 L. Ed. 2d 131 (2011) (“We consider whether [35 U.S.C.] § 282 requires an invalidity defense to be proved by clear and convincing evidence. We hold that it does.”).

b. Obviousness

“A patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a). Obviousness is a question of law, which depends on underlying factual inquiries.

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007) (quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966)).

“[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR*, 550 U.S. at 418. Likewise, a defendant asserting obviousness in view of a combination of references has the burden to show that a person of ordinary skill in the relevant field had a reason to combine the elements in the manner claimed. *Id.* at 418-19. The Supreme Court has emphasized the need for courts to value “common sense” over “rigid preventative rules” in determining whether a motivation to combine existed. *Id.* at 419-20. “[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the

elements in the manner claimed.” *Id.* at 420. In addition to showing that a person of ordinary skill in the art would have had reason to attempt to make the composition or device, or carry out the claimed process, a defendant must also demonstrate that “such a person would have had a reasonable expectation of success in doing so.”

PharmaStem Therapeutics, Inc. v. ViaCell, Inc., 491 F.3d 1342, 1360 (Fed. Cir. 2007).

A combination of prior art elements may have been “obvious to try” where there existed “a design need or market pressure to solve a problem and there [were] a finite number of identified, predictable solutions” to it, and the pursuit of the “known options within [a person of ordinary skill in the art’s] technical grasp” leads to the anticipated success. *Id.* at 421. In this circumstance, “the fact that a combination was obvious to try might show that it was obvious under § 103.” *Id.*

A fact finder is required to consider secondary considerations, or objective indicia of nonobviousness, before reaching an obviousness determination, as a “check against hindsight bias.” See *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1079 (Fed. Cir. 2012). “Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” *Graham*, 383 U.S. at 17–18.

“Because patents are presumed to be valid, see 35 U.S.C. § 282, an alleged infringer seeking to invalidate a patent on obviousness grounds must establish its obviousness by facts supported by clear and convincing evidence.” *Kao Corp. v. Unilever U.S., Inc.*, 441 F.3d 963, 968 (Fed. Cir. 2006) (citation omitted). In conjunction

with this burden, the Federal Circuit has explained that,

[w]hen no prior art other than that which was considered by the PTO examiner is relied on by the attacker, he has the added burden of overcoming the deference that is due to a qualified government agency presumed to have properly done its job, which includes one or more examiners who are assumed to have some expertise in interpreting the references and to be familiar from their work with the level of skill in the art and whose duty it is to issue only valid patents.

PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299, 1304 (Fed. Cir. 2008) (quoting *Am. Hoist & Derrick Co. v. Sowa & Sons*, 725 F.2d 1350, 1359 (Fed. Cir. 1984)).

c. Enablement and written description

The statutory basis for the enablement and written description requirements, § 112 ¶1, provides in relevant part:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same

“The enablement requirement is met where one skilled in the art, having read the specification, could practice the invention without ‘undue experimentation.’” *Streck, Inc. v. Research & Diagnostic Systems, Inc.*, 665 F.3d 1269, 1288 (Fed. Cir. 2012) (citation omitted). “While every aspect of a generic claim certainly need not have been carried out by the inventor, or exemplified in the specification, reasonable detail must be provided in order to enable members of the public to understand and carry out the invention.” *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1366 (Fed. Cir. 1997).

The specification need not teach what is well known in the art. *Id.* (citing *Hybritech v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed. Cir. 1986)). A reasonable amount of experimentation may be required, so long as such experimentation is not “undue.” *ALZA Corp. v. Andrx Pharmaceuticals, Inc.*, 603 F.3d 935, 940 (Fed. Cir. 2010).

“Whether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations.” *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1378 (Fed. Cir. 2009) (citing *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988)). The Federal Circuit has provided several factors that may be utilized in determining whether a disclosure would require undue experimentation: (1) the quantity of experimentation necessary; (2) the amount of direction or guidance disclosed in the patent; (3) the presence or absence of working examples in the patent; (4) the nature of the invention; (5) the state of the prior art; (6) the relative skill of those in the art; (7) the predictability of the art; and (8) the breadth of the claims. *In re Wands*, 858 F.2d at 737. These factors are sometimes referred to as the “Wands factors.” The fact finder need not consider every one of the Wands factors in its analysis, rather, a fact finder is only required to consider those factors relevant to the facts of the case. See *Streck, Inc.*, 655 F.3d at 1288 (citing *Amgen, Inc. v. Chugai Pharm. Co., Ltd.*, 927 F.2d 1200, 1213 (Fed. Cir. 1991)).

The enablement requirement is a question of law based on underlying factual inquiries. See *Green Edge Enterprises, LLC v. Rubber Mulch Etc., LLC*, 620 F.3d

1287, 1298-99 (Fed. Cir. 2010) (citation omitted); *Wands*, 858 F.2d at 737.

Enablement is determined as of the filing date of the patent application. *In re '318 Patent Infringement Litigation*, 583 F.3d 1317, 1323 (Fed. Cir. 2009) (citation omitted). The burden is on one challenging validity to show, by clear and convincing evidence, that the specification is not enabling. See *Streck, Inc.*, 665 F.3d at 1288 (citation omitted).

A patent must also contain a written description of the invention. 35 U.S.C. § 112, ¶ 1. The written description requirement is separate and distinct from the enablement requirement. See *Ariad Pharmaceuticals, Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2011). It ensures that “the patentee had possession of the claimed invention at the time of the application, i.e., that the patentee invented what is claimed.” *LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1344-45 (Fed. Cir. 2005). The Federal Circuit has stated that the relevant inquiry – “possession as shown in the disclosure” – is an “objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed.” *Ariad*, 598 F.3d at 1351.

This inquiry is a question of fact; “the level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology.” *Id.* (citation omitted). In this regard, defendants must provide clear and convincing evidence that persons skilled

in the art would not recognize in the disclosure a description of the claimed invention.

See *PowerOasis*, 522 F.3d at 1306-17 (citation omitted).

B. The '462 Patent

The '462 patent, "Portable Computing, Communication and Entertainment Device with Central Processor Carried in a Detachable Handset," was filed December 19, 2005 and issued October 10, 2006. It is a continuation of application no. 09/719,290 filed on April 7, 2000, which claims priority from provisional application no. 60/128,138 filed on April 7, 1999. It claims a system that involves: (1) a portable device referred to in the claims as a "detachable handset" that has a central processor; and (2) a "docking display unit" that lacks a central processor. (See '462 patent, col. 1:19-30, 6:2-20) The detachable handset can be docked with the docking display unit and, when docked, the central processor in the detachable handset controls the entire system. (*Id.*) Independent claim 1 and dependent claims 8, 10, 11 and 13 are reproduced below.

1. A portable processing device comprising:

a detachable handset unit sized for handheld grasping and including a central processor and a plurality of first circuits, said processor controlling the operation of said first circuits, and said first circuits including at least a video interface, a communication interface and a data input interface;

a portable docking display unit dimensioned substantially larger than said detachable handset unit, said portable docking display unit including a first display and a plurality of second circuits, said plurality of second circuits not including a central processor and including a video interface, and a data input interface, and wherein said central processor controls the operation of at least one of said second circuits and said first display when said detachable handset unit is

docked with said docking display unit;

and the docking display unit is fully operable only when the detachable handset is docked thereto.

...

8. A device, as set forth in claim 1, Wherein said detachable handset unit includes a connection for an external headphone.

...

10. A device, as set forth in claim 1, Wherein said detachable handset unit includes a Global Positioning System receiver.

11. The device of claim 1, Wherein the docking display is configured as a clamshell unit with first and second portions, having the said auxiliary display in the first portion and an auxiliary keyboard in the second portion.

...

13. The device of claim 11, Wherein the docking display includes a recessed portion in which the handset is docked, wherein the handset when docked, is positioned on the back of one of the portions of the clam shell unit.

(*Id.* at col. 6:2-64)

1. Obviousness in view of Nelson and Smith

At trial, Motorola asserted that claims 1, 11 and 13 of the '462 patent are obvious in view of (1) U.S. Patent No. 5,436,857 ("Nelson") and (2) U.S. Patent No. 7,549,007 ("Smith").

a. Claim 1

i. Motorola's evidence

Motorola sub-divides claim 1 into three elements: (1) element 1A refers to the

“detachable handset” limitation; (2) element 1B refers to the “portable docking display” limitation; and (3) element 1C refers to the limitation that the docking display unit be fully operable “only when the detachable handset is docked thereto.” (D.I. 320 at 2-6) Motorola argues that Smith discloses element 1A, Nelson discloses element 1B, and Nelson and Smith both disclose element 1C. (*Id.*)

With respect to element 1A, Motorola argues that the portable telephone in Smith, on its own, meets every limitation of the claimed detachable handset unit. (*Id.* at 3) Under the court’s construction, the detachable handset is “a device that can be attached to and detached from the portable docking display unit and is small enough to be held in one hand.” (D.I. 284 at 67) Element 1A additionally requires that the detachable handset include a central processor, which was construed by the court as “the part of a computer system that performs the primary computational functions, e.g., to control the operation of various circuits.” (*Id.* at 65)

At trial, Motorola’s expert, Dr. Timothy Drabik (“Dr. Drabik”), identified the “detachable handset” in Smith as “the cellphone that you can dock with . . . the laptop.” (D.I. 337 at 955:17-18) Dr. Drabik testified that the abstract of Smith claims that “the portable telephone serves as the portable computer’s modem and functions while installed in the computer.” (*Id.* at 955:23-24; see DTX 3, abstract) To support his assertion that the cellphone in Smith is “detachable” and “sized for handheld grasping,” two limitations of the claimed handset, Dr. Drabik pointed to figure 12, which “shows [the cellphone] is in somebody’s left hand.” (D.I. 337 at 956:8-11) Dr. Drabik testified that the “central processor” limitation is disclosed in figure 13 of Smith, which shows that the handset contains a microprocessor associated with RAM and ROM. (*Id.* at

956:17-19; see DTX 3, fig. 13) Dr. Drabik opined that figures 12 and 13 of Smith illustrate that the detachable handset has a video interface, a communications interface, and a data input interface. (*Id.* at 957:2-22; see DTX 3, fig. 12-13)

On cross-examination, IV's expert, Dr. Donald Alpert ("Dr. Alpert"), admitted that "whatever is described in element 1A of [the '462 patent] . . . was known" prior to the filing date of the '462 patent. (D.I. 340 at 1613:18-22; see also *id.* at 1616:24-1617:1) Dr. Alpert also agreed that element 1A describes "any number of cellphones that existed in the mid to late nineties." (*Id.* at 1614:10-15) Dr. Alpert was impeached with his deposition testimony, in which he agreed that "Smith discloses all of [element] 1A." (D.I. 340 at 1615:2-1)

Motorola then turns to element 1B of claim 1, arguing that the "portable docking station" limitation is fully disclosed in Nelson. (D.I. 320 at 3) Specifically, element 1B requires that the portable docking display unit be: (1) "dimensioned substantially larger than [the] detachable handset unit;" (2) have a first display; and (3) have a plurality of second circuits including a video interface and a data input interface, but no central processor. ('462 patent, col. 6:9-18) In its memorandum regarding claim construction, the court noted that the "patent prosecution history makes clear that the docking display unit does not have a processor of its own." (D.I. 284 at 66) Element 1B also requires that, when docked, the central processor in the detachable handset control the display and at least one of the second circuits. *Id.*

At trial, Dr. Drabik testified that figure 2 of Nelson discloses a "smaller" module relative to the docking station, a first display, a video interface, and a data input

interface, but no central processor.¹ (D.I. 337 at 968:22-969:20; see DTX-60, fig. 2)

With respect to the “control” limitation, Dr. Drabik testified that the central processor in the Nelson handset “controls the operation of at least one of [the] second circuits and [the] first display when the module is docked.” (*Id.* at 970:6-8)

Motorola next argues that both Nelson and Smith disclose element 1C of claim 1, which requires that the docking display unit be “fully operable only when the detachable handset is docked thereto.” (‘462 patent, col. 6:19-20) Motorola submits – and on cross-examination, IV’s expert Dr. Alpert testified – that there is no “other processor in Nelson other than the one that was in the detachable handset.” (D.I. 340 at 1623:2-5; D.I. 337 at 971:17-21) The absence of any processor, Motorola argues, renders the uncoupled docking display unit inoperable. (See D.I. 320 at 6; D.I. 337 at 971:16-20) Motorola also argued at trial that the Smith docking display unit is not fully operable in the absence of the detachable handset unit. (D.I. 337 at 973:1-3) Specifically, Dr. Drabik testified that the docking display unit in Smith “can’t connect to the Internet using the wireless of the phone unless the phone is docked.” (*Id.* at 972:1-5)

Finally, Motorola argues that there is a motivation to combine a detachable handset, such as the one in Smith, with a “dumb” portable docking display unit, such as the one in Nelson. Dr. Drabik testified at trial that because “the module of Nelson didn’t have a . . . modem in it,” a person having ordinary skill in the art “would want to adopt the cellphone module of Smith . . . into Nelson.” (*Id.* at 937:9-18) Dr. Drabik testified

¹IV’s expert, Dr. Alpert, testified on cross-examination that the docking station in Nelson has a video interface and lacks a central processor. (D.I. 340 at 1616:2-10)

that the written specification of Nelson “says that the module may also contain other components.” (*Id.* at 937:19-22) Dr. Drabik was unsure whether a pre-1999 cellphone existed that contained a processor sufficiently powerful to run the Nelson docking station.² (*Id.* at 974:12-16) However, Dr. Drabik emphasized that one of ordinary skill could start with the cellphone of Smith “and alter it to have enough processing power to run the entire system.” (*Id.* at 974:8-11) IV’s expert, Dr. Alpert, testified on cross-examination that the central processor in the Smith cellphone was, in fact, used to power “the first IBM personal computer.” (D.I. 340 at 1617:2-13)

As an alternative to altering the Smith cellphone, Dr. Drabik opined that one could choose to “alter the module of Nelson to have cellphone capability.” (D.I. 337. at 1016:6-12; see D.I. 336 at 879:2-5) Dr. Drabik testified that modifying the Nelson module would be desirable given that a person having ordinary skill in the art “would . . . have understood that there was a desire for communications functions to be added to portable devices. And that would have been a good impetus to combine [the] references.” (D.I. 337 at 948:17-21) IV’s expert, Dr. Alpert, agreed that some “people might consider it more efficient for the central processor in a portable processing module to control all of the interfaces in the base unit.” (D.I. 340 at 1622:19-22)

ii. IV’s evidence

²Mr. Rajendra Kumar (“Mr. Kumar”), the inventor of the ‘462 patent, testified on cross-examination that at the time of filing for his own patent, “there were already commercially available processors that could act as a central processor and control the . . . portable display unit.” (D.I. 333 at 240:14-17) Another IV expert, Dr. Alpert, confirmed that the ‘462 patent itself “provides examples of commercially available processors that were powerful enough to adequately perform the functions of both the handset and the docking station.” (D.I. 340 at 1618:20-24)

IV responds to Motorola's argument that the cellphone in Smith fully discloses element 1A with evidence that the Smith cellphone lacks a "video interface."³ (D.I. 324 at 4) IV's expert, Dr. Alpert, testified that there is no "video interface" in the Smith handset, and that what Dr. Drabik identified as a video interface was in fact a "computer telephone interface." (D.I. 340 at 1573:7-17)

With respect to element 1B, IV argues that the Nelson detachable handset does not "control" the portable docking display unit. (D.I. 324 at 3) Dr. Alpert opined that although "there's a possible way for the processor to communicate with the keyboard controller . . . there's nothing in Nelson that specifically says that the processor communicates with it, and there's nothing in Nelson that says that the processor controls the keyboard controller."⁴ (D.I. 340 at 1569:5-10; see also *id.* at 1575:15-21)

IV does not present evidence to refute Motorola's assertion that element 1C – which requires that the docking display unit be fully operable only when the detachable handset is docked – is fully disclosed in Smith and Nelson.

Finally, IV addresses the motivation to combine Smith and Nelson. As to whether a user would want to modify the detachable handset in Nelson to include more functionality, Dr. Alpert opined,

what Nelson is saying is that you should have the human interface devices such as keyboard display, that those

³IV's argument that the "Nelson handset has only one interface" is not relevant to the question of whether the Smith handset discloses element 1A of claim 1. (D.I. 324 at 3; see D.I. 340 at 1567:17-1568:11)

⁴IV also argues that the Smith cellphone is incapable of controlling the Smith laptop (D.I. 324 at 4), but this argument is out of place here given that Motorola claims that the Nelson docking display, not the Smith laptop, discloses element 1B of claim 1.

should be on the dock and not on the handset. And, in fact, it therefore means there would be absolutely no reason to replace the module with a handset because that would result in having both a display interface, keyboard interface on both the handset and on the dock. That's what [the '462 patent] requires and Nelson says, don't do that.

(*Id.* at 1570:20-1571:3; see also *id.* at 1625:17-18)

As to whether a user would want to use the Smith cellphone to operate the Nelson portable docking display, IV argues that the Smith cellphone would have to be “redesigned completely” before it could replace the Nelson handset because it (1) lacks the ability to control the Smith laptop,⁵ and (2) lacks the processing power required for a portable computer. (D.I. 324 at 4, 7) In support of the former assertion, IV cites Dr. Alpert’s testimony that “the laptop can control the cellphone in order to perform some useful functions . . . but the cellphone itself does not have any control over the laptop and, most specifically, there’s no way that it can . . . present something on the display of the laptop.” (D.I. 340 at 1573:1-6; see also *id.* at 1575:7-9; D.I. 337 at 1015:22-25) In support of the latter assertion, IV cites Dr. Alpert’s testimony that the processor in the Smith cellphone “could only support a minimum amount of memory, nothing that would . . . approach the minimum required for a full personal computer.” (D.I. 340 at 1575:4-6)

More generally, IV argues that Nelson and Smith address different issues, and

⁵Although IV alludes to the fact that the Smith handset would need to be redesigned as part of its motivation to combine argument, IV offers evidentiary support for this argument as part of its discussion of element 1B. The court moved the full argument here for the sake of clarity. IV additionally makes the argument that the Smith computer would also need to be redesigned, but this argument is out of sync with Motorola’s position that the Smith cellphone and the Nelson docking display are the combined elements. (See D.I. 324 at 7)

that it would be illogical to combine them. (D.I. 324 at 5-6) In particular, the Nelson patent “provides more than one environment, particularly desktop and portable environments, for a common processor, hard drive and memory module” (D.I. 340 at 1571:11-14), while the Smith patent “discloses an arrangement where you have a portable computer, such as a laptop, and you can attach a cellphone to that as a peripheral” (*Id.* at 1572:18-20).

b. Claims 11 and 13

Dependent claim 11 requires that the docking display be “configured as a clamshell unit,” and dependent claim 13 requires that the docking display include “a recessed portion in which the handset is docked.” (‘462 patent, col. 6:53-64) Dr. Drabik testified that “Nelson and Smith have the clamshell laptop form factor . . . [t]he keyboard and display are protected when it’s closed.” (D.I. 337 at 948:1-4) Dr. Drabik opined that “practically all the prior art that we’ve talked about today had that [clamshell] configuration” including “Nelson, Figure 2, and Smith, Figure 9.” (*Id.* at 979:5-13) Dr. Alpert, IV’s expert, agreed that “we’ve seen lots of clam shells that existed before 1999 in this case alone.” (D.I. 340 at 1624:19-21) Finally, Dr. Drabik testified that the requirement in claim 13 for a recessed portion in which the handset is docked is satisfied “very clearly with Figure 2 in Nelson . . . It’s also true of Smith.”⁶ (D.I. 337 at 979:16-24)

2. Obviousness in view of Nelson, Smith and Ethridge

At trial, Motorola also argued that claims 8 and 10 are obvious based on the

⁶IV did not present rebuttal evidence for claims 11 and 13.

combination of (1) Nelson, (2) Smith, and (3) U.S. Patent No. 5,798,733 (“Ethridge”).

a. Motorola’s evidence

Claim 8 requires that the detachable handset unit in claim 1 additionally include “a connection for an external headphone.” (‘462 patent, col. 6:44-46) Dr. Drabik opined that the limitations of claim 8 are satisfied given that the first flip phones, portable cassette players, and “even transistor radios had headphone connections” prior to the ‘462 patent. (D.I. 337 at 928:9-17; see also *id.* at 927:11-17; 975:7-11) Dr. Drabik also testified that figure 12a of Ethridge, a patent directed to an “interactive position guidance apparatus,” shows a headset plugging into a portable module. (*Id.* at 976:6-10)

Claim 10 requires that the detachable handset unit in claim 1 also include a Global Positioning System (“GPS”) receiver. (‘462 patent, col. 6:50-52) Mr. Rajendra Kumar (“Mr. Kumar”), the inventor of the ‘492 patent, admitted that “there were off the shelf GPS receivers available when [he] wrote [his] patent.” (D.I. 333 at 243:4-6) Additionally, both Dr. Drabik and Dr. Alpert agreed that Ethridge discloses a portable GPS unit. (D.I. 337 at 976:23-977:1; D.I. 340 at 1566:5-9) Specifically, Dr. Drabik explained that figure 1 of Ethridge shows “the GPS strapped to somebody’s forearm, and the block diagram shows a GPS processor and an antenna inside . . . the module.” (D.I. 337 at 976:23-977:1) Regarding the motivation to combine a GPS unit with the detachable handset in claim 1, Dr. Drabik opined that a person would want to put the GPS feature in a detachable handset unit in order to add “more and more functions to portable devices” such as navigation assistance. (*Id.* at 978:9-14)

b. IV’s evidence

IV argues that adding an additional reference, such as Ethridge, to two references that are already lacking some requirements “doesn’t help address those deficiencies.” (D.I. 340 at 1575:22-1576:3) IV adds that, in any event, there would be no motivation to combine Smith and Nelson with Ethridge, an unrelated patent that “describes a solution that parachute jumpers can use . . . particularly if they are jumping at night.” (*Id.* at 1565:21-24) Dr. Alpert opined that if a module is not an independently functioning device, “there would be no reason to put a headset connection” on it or to add a GPS given that “you still can’t get any of the information out from the module that would help you to know your position.” (*Id.* at 1566:16-25)

3. Analysis

The parties dispute: (1) whether Smith fully discloses element 1A of claim 1; (2) whether Nelson fully discloses element 1B of claim 1; and (3) whether there is a motivation to combine Smith and Nelson. Motorola contests the existence of any dispute regarding element 1A, pointing to Dr. Alpert’s testimony that 1A describes “any number of cellphones that existed in the mid to late nineties” (*id.* at 1614:10-15), as well as Dr. Alpert’s deposition statement that element 1A is fully disclosed by Smith (*id.* at 1615:2-1). Dr. Alpert maintained at trial, however, that element 1A is not fully disclosed because the Smith cellphone lacks a video interface; thus, an issue of fact remains. (*Id.* at 1573:7-17)

With respect to element 1B, there is no dispute that the docking display unit in Nelson is “dimensioned substantially larger than [the] detachable handset unit,” and has a display and a plurality of second circuits including a video interface and a data input interface, but not a central processor. (D.I. 337 at 968:22-969:20; D.I. 340 at 1616:2-

10) However, the parties do contest whether the Nelson handset “controls the operation of at least one of said second circuits and said first display” when docked to the docking display unit. Specifically, Motorola’s position is that the block diagram in figure 2 of Nelson shows a “path” between the processor and the relevant interfaces, thereby demonstrating the ability of the processor to “talk” to the interfaces when docked. (D.I. 337 at 970:9-17) IV’s position is that, although it is theoretically possible for the handset to communicate with the docking display, there is nothing in Nelson that **specifically** discloses such communication or control. (D.I. 340 at 1569:5-10)

The central dispute, however, is whether there exists sufficient motivation to combine the handset from Smith with the docking display from Nelson. The court need not address whether IV presented sufficient evidence regarding elements 1A and 1B to withstand a motion for JMOL as long as a reasonable jury could find that there is insufficient motivation to combine the references in the first place.

Although it is a question of fact, “the question of motivation to combine may nonetheless be addressed on . . . JMOL in appropriate circumstances.” *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1239 (Fed.Cir.2010) (citations omitted). The court previously addressed the question of motivation to combine in its memorandum opinion regarding summary judgement, defining the key issue as whether a person having ordinary skill in the art would combine the two elements given that there is no indication that the detachable handset in Smith would be able to control the docking display in Nelson. (D.I. 284 at 70) Motorola’s stance at trial, as articulated by Dr. Drabik, was that obviousness does not necessarily require the combination of “two separate physical things,” but rather that a person is allowed to combine “information . . . to come

up with what's in the claim." (D.I. 336 at 877:11-20) In essence, Dr. Drabik argued that the references need not "literally" fit together to be invalidating. (D.I. 337 at 949:7)

IV responds by citing the testimony of Dr. Alpert that Nelson teaches away from adding user interfaces to the detachable handset because the purpose of the handset is not to function as its own device, but to act as a common module for more than one computer. (D.I. 324 at 6) IV similarly dismisses the inverse possibility of modifying the cellphone in Smith, arguing that the cellphone does not have the processing power or ability to control the Nelson docking display unit. (*Id.* at 7)

Such competing expert testimony raises a question of fact regarding the appropriateness of combining the two references. The court cannot act as an independent factfinder in selecting the most credible approach. Instead, the court is charged with determining whether there is evidence upon which the jury could properly find for the non-moving party. Viewing the record in the light most favorable to IV, the court concludes that a jury could properly credit the testimony of IV's expert above that of Motorola's expert and determine that the Nelson patent teaches away from adding increased functionality to the detachable handset.

Just as the jury could have reasonably found that there is insufficient motivation to combine the Smith and Nelson references with respect to independent claim 1, the same conclusion extends to the combination of Smith and Nelson with respect to dependent claims 11 and 13, and the combination of Smith, Nelson and Ethridge with respect to dependent claims 8 and 10.⁷ The court denies Motorola's renewed motion

⁷The parties cite to portions of the sealed record for evidence of secondary considerations of nonobviousness. (See D.I. 320 at 8-10; D.I. 324 at 9-10) Even if the

for judgment as a matter of law with respect to validity of the '462 patent.

C. The '464 Patent

The '464 patent, "User Station Software That Controls Transport, Storage, and Presentation of Content from a Remote Source," was filed April 20, 2000 and issued December 2, 2003. It is a continuation of application no. 08/641,010 filed on April 29, 1996, which is a continuation-in-part of application no. 08/251,724 filed on May 31, 1994. The invention "solves the problem of enabling simple, economical and prompt mass distribution of electronic information products." ('464 patent, col. 5:12-14) Claims 1, 8, 16 and 17 are at issue. Independent claim 1 and dependent claims 8, 16 and 17 are reproduced below.

1. A software product for use at a user station, the user station including a processor and a storage device, the software product comprising computer executable instructions that, when executed by the processor:
 - enable a user at the user station to select content from each of a plurality of independent publishers;
 - effect transport of the selected content from each of the plurality of publishers to the user station over a communications network and, without user intervention, effect storage of the transported content to the storage device such that the content is retained on the storage device upon shutting down of the user station and/or deactivation of the software product; and
 - effect presentation of the stored content to the user at the user station with a user interface that is customized to the respective publishers.

court were to find IV's evidence of secondary considerations of nonobviousness to be lacking, it would not alter the court's opinion that a reasonable jury could find that the '492 patent is nonobvious based on lack of motivation to combine prior art references.

...

8. The software product as set forth in claim 1, wherein the transport of the selected content to the user station is effected without user intervention.

...

16. The software product as set forth in claim 1, wherein the transport of the selected content to the user station is effected using a non-proprietary data transfer protocol.

17. The software product as set forth in claim 1, wherein the communications network is the Internet

(*Id.* at col. 60:39-61:51)

1. Anticipation

At trial, Motorola argued that claims 1 and 8 are anticipated by U.S. Patent No. 4,654,799 ("Ogaki").

a. Claim 1

Motorola's expert, Dr. Brian von Herzen ("Dr. von Herzen"), testified that Ogaki describes "a software Vending Machine that enables you to buy software at a user station, namely the vending machine itself, and it lets you choose from a large array of squares, a large array of different publishers and try out the software before you actually take it home." (D.I. 338 at 1251:21-25) Dr. von Herzen explained that a "central host system" would be responsible for "distributing the software programs to multiple vending machines that could be located all around the country." (*Id.* at 1252:25-1253:2) This central host system "enables software maniacs . . . to write and upload programs for games, and you could have multiple different publishers uploading programs that would then be transferred and distributed to all of these vending

machines and then the writers of the software would benefit from that when those programs were purchased." (*Id.* at 1253:3-11)

Dr. von Herzen testified that all of the elements of the preamble of claim 1 of the '464 patent are disclosed in Ogaki as follows: (1) the "user station" is the vending machine "where the user actually sees the software and accesses it;" (2) the "processor" is central processing unit in figure 4b; (3) the "storage device" appears in figure 4B as the "[h]ard disk memory element;" and (4) the "software product with the executable instructions" is also shown in figure 4b as "program display RAM" and "program copy RAM." (*Id.* at 1254:1-22)

Claim 1 additionally requires "a user at the user station to select content from each of a plurality of independent publishers." ('464 patent, col. 60:43-44) Dr. von Herzen averred that this limitation is disclosed by Ogaki in that:

[A] game collector would let you choose which game you actually wanted to try out. And once you selected the game, it would appear on the lower console. You could try it out and see how you liked it. And this is a selection process that occurred that would enable you to select a content from any of several colored publishers.

(D.I. 338 at 1255:9-15; see DTX 155, col. 8:20-35) Dr. von Herzen added that a "plurality of independent publishers" were involved because the Ogaki patent describes how "a software program developed or designed by a software maniac, amateur fan or any other person, say software developer, could be uploaded to the central station and then distributed to the accuser's stations." (D.I. 338 at 1256:4-11; see DTX 155, col. 2:17-23)

A second limitation of claim 1 is that the selected content be transported "from

each of the plurality of publishers to the user station over a communications network.” (‘464 patent, col. 60:46-48) Dr. von Herzen testified that this limitation is disclosed in figure 4a of Ogaki, which depicts “two modem interfaces interconnected with a network, and those elements . . . represent the modem interfaces that provide this transport from the central host computer to the user station.” (D.I. 338 at 1256:23-1257:1; see DTX 155, col. 11:39-47, col. 6:8-23)

A third limitation of claim 1 is to “effect storage of the transported content to the storage device such that the content is retained on the storage device upon shutting down of the user station and/or deactivation of the software product.” (‘464 patent, col. 60:49-52) Dr. von Herzen testified that this limitation appears in figure 4b where Ogaki “shows the hard disk memory . . . that represents the storage that is non-volatile.” (D.I. 338 at 1257:15-18) Dr. von Herzen added that the text of Ogaki additionally describes hard disk memory as well as “storing the content on a cassette tape.” (*Id.* at 1257:19-24; see DTX 155, col. 11:39-47, col. 9:23-29)

Finally, Dr. von Herzen testified that the limitation of “effecting presentation of the stored content using the customized interface,” is present in Ogaki as “the purple cathode ray tube or television that enables you to see the game running.” (D.I. 338 at 1258:9-15; DTX 155, col. 6:59-64, col. 9:44-52) Motorola argues that the interface not only includes the hardware depicted in figure 2 of Ogaki, but that it also includes the program that is “executed or run on the CRT [screen].” (D.I. 338 at 1258:16-19; see DTX 155, fig. 2) In its briefing, Motorola directs the court’s attention to portions of Ogaki that describe how, following selection, the CRT screen displays “the contents of the program, e.g. play a video game.” (DTX 155, col. 6:59-64; see *also id.* at col. 9:45-

50)

In accordance with the court's opinion on summary judgment that Ogaki discloses the "transport" and "store" content limitations, IV focuses only on the "select content" and "present content" limitations. (See D.I. 284 at 55) IV's expert, Dr. Jason Nieh ("Dr. Nieh"), testified that the "select content" limitation is not satisfied because "[t]he user doesn't get to select what's stored on that vending machine," rather "[w]hat you have on that vending machine is whatever the owner of the vending machine . . . put there." (D.I. 340 at 1649:12-22) IV directs the court's attention to the disclosure in Ogaki that "programs and the related data . . . are transmitted from the host system 3 to the appropriate memory areas of the hard disk memory 33," arguing in its briefing that the user selects a **portion** of the transported content, which is contrary to the language of the claim in which the software product "effect[s] transport of the selected content." (D.I. 324 at 14; see DTX 155 at 11:42-46)

IV next argues that Ogaki does not teach "effect presentation of the stored content to the user at the user station with a user interface that is customized to the respective publishers." (D.I. 324 at 11) IV focuses on the requirement that the user interface be "customized to the respective publishers." IV first argues that the user interface is unchanging because it consists of the physical hardware, including switches and keys, as depicted in figure 2 of Ogaki. (*Id.*) For evidentiary support, IV points to Dr. von Herzen's admission on cross-examination that the "joystick is in a fixed particular location." (D.I. 338 at 1413:12-13)

IV then highlights Dr. Nieh's testimony that the "stored content" is not presented because only a "brief demonstration" of the content is presented. (D.I. 340 at 1651:20-

25) IV argues that Motorola presents inconsistent arguments given that Dr. von Herzen opined, in the context of Google Play, that “where there’s a preview, that doesn’t count as content that’s stored content being presented with the user interface that’s customized.” (*Id.* at 1652:1-5)

b. Claim 8

Claim 8 of the ‘464 patent is dependent on claim 1 and requires that “the transport of the selected content to the user station [be] effected without user intervention.” (‘464 patent, col. 61:17-19) Dr. von Herzen testified that the Ogaki patent “talks about transmitting from the host system to the appropriate memory areas of the hard disk that’s sitting on the user station. So that effectively is the transport without user intervention.” (D.I. 338 at 1259:12-16; see DTX 155, col. 11:42-45) IV’s expert, Dr. Nieh, countered with the opinion that claim 8 “is not anticipated by Ogaki because claim 8 depends on claim 1, and claim 1 is not anticipated, so this one isn’t either.” (D.I. 340 at 1652:13-15)

c. Analysis

IV’s position at trial regarding the “select content” limitation was that the vending machine host, not the user, selects the content that is placed on the vending machine. (See *id.* at 1649:12-22) IV did not, however, rebut Motorola’s argument – at the summary judgment stage or at trial – that even if the host selects content that will appear on the vending machine, a user also selects content by choosing a game, which then appears in the lower console for testing. (See D.I. 284 at 54; D.I. 338 at 1255:9-15) Moreover, Motorola’s position is consistent with the court’s construction of the term “content” as “any form of electronic information.” (D.I. 284 at 51)

In its post-trial briefing, IV argues that the “select content” limitation is nonetheless undisclosed because the user must select **all** of the transported content, not just a portion of the transported content. (D.I. 324 at 14) IV avers that the transported content and selected content must be the same, citing the claim language “transport of **the** selected content.” (*Id.* at 14) Said another way, IV argues that the user must select both the content transported to the vending machine as well as the content at the vending machine, which is at odds with the host first selecting content “in bulk” that is transported to the vending machine. (*Id.* at 14) As such, IV resurrects its argument at summary judgment that Ogaki “does not disclose transporting content . . . which is **selected by the user.**” (D.I. 284 at 54-55; D.I. 250 at 23) The court adopts the same reasoning it embraced at summary judgment, namely that “[t]his argument requires that the content be transported after it is selected,” and claim 1 “does not require this sequence of steps.” (D.I. 284 at 55)

IV’s next argues that the “present content” limitation is not disclosed because the user interface consists of only non-customizable hardware. Motorola responds that the user interface additionally includes the CRT screen, which presents a customized game depending on the selection of the user. (D.I. 338 at 1258:9-15) In its summary judgment opinion, the court construed “effect presentation . . . with a user interface that is customized to the respective publishers” to mean “display user-selected content in a manner specific to the publisher/source of the content.” (D.I. 284 at 51) The court discussed how the software product should “allow the display of a user interface,” a position that would be rendered nonsensical if the user interface consisted of only hardware elements.

IV also argues that the “present content” limitation is not disclosed because only “brief demonstrations” are displayed rather than the full content of the program. Specifically, IV cites a portion of the Ogaki specification that states that the CRT “provides a brief demonstration of the program.” However, IV neglected to include the first part of the sentence, which states that the CRT also “displays the contents of each program on sale.” (DTX 155, col. 3:55-57) Other excerpts from the specification also disclose that the content of the selected program is presented on the CRT. (See *id.* at col. 6:59-64, col. 9:45-50) Ultimately, Motorola’s position regarding the “present content” limitation is supported by the Ogaki specification and is consistent with the court’s construction of content as being “any form of electronic information.” (D.I. 284 at 51)

Finally, IV offers no substantive rebuttal to Motorola’s evidence that Ogaki teaches claim 8 by disclosing transmission of data from the host system to the memory areas of the hard disk in the user station. (D.I. 338 at 1259:12-16) Altogether, after drawing all reasonable inferences in favor of the non-moving party, the court finds that IV has failed to present evidence upon which a jury could properly rule in their favor. Therefore, the court grants Motorola’s motion for a judgment as a matter of law with respect to validity of claims 1 and 8 of the ‘464 patent.

2. Obviousness

At trial, Motorola asserted that claims 16 and 17 of the ‘464 patent are obvious in view of (1) Ogaki and (2) a September 1993 article by author Dennis Reynolds

discussing use of the Internet (“Reynolds”).⁸

a. Evidence

Claim 16 depends on claim 1 and requires that the “transport of the selected content to the user station [be] effected using a non-proprietary data transfer protocol.” (‘464 patent, col. 61:47-49) Claim 17 also depends on claim 1 and requires that the “communication network [be] the Internet.” (‘464 patent, col. 61:50-51) Dr. von Herzen testified that claims 16 and 17 “would both be met if [defendants] can show that the Internet was around” because “[t]he Internet uses something that’s called IP or Internet protocol and that Internet protocol is non-proprietary.” (D.I. 338 at 1248:3-11) IV’s expert, Dr. Nieh, agreed that “the protocol the Internet uses, TCP/IP, is a non-proprietary protocol.” (D.I. 342 at 1688:20-24; D.I. 336 at 767:20-22) Dr. von Herzen testified that the Internet appeared at least by 1993, the date of the Reynolds article “that talks about dial-up Internet.” (D.I. 338 at 1262:4-6; DTX 149) Indeed, Dr. von Herzen, Dr. Nieh and Mr. Richard Reisman (“Mr. Reisman”), the inventor of the ‘464 patent, all agree that the Internet was around before 1990. (D.I. 338 at 1259:25-1260:4; D.I. 335 at 531:11-15; D.I. 342 at 1688:25-1689:3)

As for the motivation to combine Ogaki and Reynolds, Dr. von Herzen opined that once a server computer and a user station were in place, “dial-up Internet was a straightforward mechanism in September 1993 to actually connect the systems.” (D.I. 338 at 1263:21-25) Mr. Reisman admitted that the file transfer protocol systems that were around prior to his ‘464 patent “allowed users to see a listing of files that were

⁸Dennis Reynolds, “Evaluating Dial-Up Internet Access Options,” Internet Librarian, 86-93 (Sept. 1993).

available to download, select the files to download and then receive them over a network" as long as "you found where to look for the files." (D.I. 335 at 604:13-18) Dr. Nieh also admitted that he personally "used the Internet to transfer software files by 1993." (D.I. 342 at 1688:11-19)

In response, Dr. Nieh testified that "Ogaki talks about something completely different and talks about the opposite of using non-proprietary protocols and the Internet." (D.I. 340 at 1652:23-25) More particularly, in the specification, Ogaki "talks about a private or exclusive data communication line." (*Id.* at 1653:5-9; see DTX 155 at col. 6:16-18) IV argues that Ogaki is a "'pre-Internet' 1987 reference" (D.I. 342 at 15), and Dr. Nieh testified that in 1987, modem manufacturers "would come up with their own proprietary protocols because they wanted an edge over everybody else."⁹ (D.I. 340 at 1653:10-14) As for the motivation to combine Ogaki and Reynolds, Dr. Nieh stated "I don't think one of ordinary skill would think about, that it would be obvious to put those two together as a result." (*Id.* at 1653:22-1654:2)

b. Secondary considerations of nonobviousness

IV argues that secondary considerations support a finding of nonobviousness. In support of this assertion, IV cites to sealed testimony by its licensing expert showing the existence of portfolio licenses for the '464 patent. (See D.I. 338 at 1440:4-1444:2) In an unsealed portion of the trial, Dr. Nieh testified that evidence of licensing of the '464 patent is important in "that the Reisman patents were explicitly shown to potential people who wanted to take a license and . . . smartphone manufacturers looked at

⁹Dr. Nieh conceded on cross-examination that some modems, including two disclosed in Ogaki, used non-proprietary protocols by 1993. (D.I. 342 at 1694:2-7)

those patents and then said, hey, well, I think we should take a license. So I think that they thought that because they thought the patents were valid." (D.I. 342 at 1684:4-16)

Motorola argues that IV failed to establish "the required connection between its evidence of alleged secondary considerations, *i.e.*, certain portfolio licenses, and claims 16 and 17 of the '464 patent." (D.I. 320 at 16) Specifically, Motorola argues that IV did not show that any value in the licenses is attributable to claims 16 and 17, which "merely recite the use of the Internet to download content." (*Id.*)

c. Analysis

It is undisputed that the Internet uses non-proprietary data transfer protocols and that the Internet existed prior to 1993. IV's argument boils down to the assertion that Ogaki "teaches away" because it discloses using proprietary modem protocols, as was the trend at the time Ogaki was published. Motorola counters with the argument that the obviousness analysis is properly conducted in the post-Internet era of the '494 patent and, as such, it would be obvious to "use the Internet to transport content over the Ogaki vending machine system." (D.I. 330 at 8)

Despite the fact that the Internet was an accepted means for transporting content in 1993, a reasonable jury might nonetheless credit Dr. Nieh's assertion that Ogaki preferred a proprietary protocol in order to gain an edge over competitors and that using a non-proprietary protocol such as the Internet would defeat this objective. (See D.I. 340 at 1653:5-17) Even if Motorola were correct that IV did not establish a sufficient nexus between evidence of secondary considerations and claims 16 and 17, this deficiency would not be enough overcome the fact that a reasonable jury could find a lack of motivation to combine Ogaki and Reynolds. For these reasons, the court

denies Motorola's judgment as a matter of law with respect to the validity of claims 16 and 17 or the '464 patent.

D. The '054 Patent

The '054 patent, "Method and System for Distributing Updates by Presenting Directory of Software Available for User Installation That Is Not Already Installed on User Station," was filed April 20, 2000 and issued April 29, 2003. It is a continuation of application no. 08/982,157 filed on December 1, 1997, which is a continuation of application no. 08/641,010, filed on April 29, 1996, which is a continuation-in-part of application no. 08/251,824, filed on May 31, 1994, which is a continuation of application no. 08/251,724 filed on May 31, 1994.

The invention relates to "a method and corresponding system for distributing updates for a plurality of different products to a plurality of uncoordinated user stations via a non-proprietary network." ('054 patent, col. 1:30-34) Reproduced below is independent claim 151 and the corresponding dependant claims 159 and 162 as well as independent claim 181 and the corresponding dependant claims 189 and 192:

151. A computer implemented method for distributing software updates from a remote computer system to a user station, the method comprising:

presenting, at the user station, as a function of an identification of software already installed on the user station, a directory of software updates available for installation on the user station;

sending to the remote computer system over a communications network a selection of software updates for distribution to the user station, wherein the selection of software updates is selected at the user station as a function of the directory; and

receiving from the remote computer system over the communications network software updates indicated by the selection

...

159. The method of claim 151, wherein, once the software updates indicated by the selection are received from the remote computer system, the software updates are automatically installed on the user station.

...

162. The method of claim 151, wherein the communications network includes the Internet.

...

181. A computer implemented method for distributing software updates from a remote computer system to a user station, the method comprising:

presenting, at the user station, as a function of an identification of software already installed on the user station, a directory of software updates available for installation on the user station and not already installed on the user station;

sending to the remote computer system over a communications network a selection of software updates for distribution to the user station, wherein the selection of software updates is selected at the user station as a function of the directory; and

receiving from the remote computer system over the communications network software updates indicated by the selection.

...

189. The method of claim 181, wherein, once the software updates indicated by the selection are received from the remote computer system, the software updates are automatically installed on the user station.

...

192. The method of claim 181, wherein the communications network includes the Internet.

(*Id.* at col. 70:48-73:33)

1. Written description and enablement

Motorola argued at trial that claims 151, 159, 162, 181, 189 and 192 of the '054 patent are invalid under 35 U.S.C. § 112 as lacking written description and enablement. (D.I. 320 at 16) Specifically, Motorola argued that the limitation of claims 151 and 181 – requiring “presenting, at the user station, as a function of an identification of software already installed on the user station, a directory of software updates available for installation on the user station” – is not supported by the specification. ('054 patent, col. 70:52-55, col. 72:51-55) Dr. von Herzen explained that Mr. Reisman filed his original patent application in May 31, 1994, but the application did not include a “description of the directory as a function of identification of software already installed on the station.” (D.I. 338 at 1285:14-21) Dr. von Herzen testified that the specification instead “described this transported software designed for a CD, where you could effectively update the CD by dialing up to a dedicated server and downloading and update.” (*Id.* at 1286:2-5)

Dr. von Herzen noted that Mr. Reisman filed a continuation-in-part in 1996 in which “Mr. Reisman added all sorts of Internet description.” (*Id.* at 1287:1-4) He further testified that the “transporter claims were canceled in 2002 and . . . hundreds of new claims were added in 2002, a very late date and with limited support.” (*Id.* at 1287:23-1288:1) Among these new claims were the six claims currently at issue, and Dr. von

Herzen opined that this late addition resulted in “a big disconnect between what was written early on and what was then put in at a very late date.” (*Id.* at 1285:4-7)

In response, IV’s expert Dr. Nieh testified that page 70 of the original application, which would later become the ‘054 specification, “discloses software updates using Mr. Reisman’s invention.” (D.I. 342 at 1676:19-23; JTX 9 at 76) He also testified that the application specifically shows “a directory form as a function of software already present” in that it “talks about looking at what was on the user station and then forming a directory of . . . added features.” (D.I. 342 at 1677:8-16) IV directs the court’s attention to the actual language of the application, which states that “[o]pen-ended access to supplemental information objects not described in the original information product can be obtained by providing in the original product means to fetch a directory of added features.” (JTX 9 at 64:24-27) Dr. Nieh testified that this language from the application “would disclose to a person of ordinary skill in the art that Mr. Reisman had in mind this idea of identifying software already installed on a user station.” (D.I. 342 at 1726:1-7)

Although the written description requirement can be satisfied by a precise description of what is claimed in the subject matter, an exact depiction of the claimed subject matter is not necessary to satisfy that requirement. See, e.g., *Koito Mfg. Co. v. Turn Key Tech., LLC*, 381 F.3d 1142, 1154 (Fed.Cir.2004). Dr. Nieh’s testimony at trial suggested that, based on what was disclosed in the original patent application, one of ordinary skill in the art would recognize that the limitation of “presenting . . . as a function of an identification of software already installed on the user station” was contemplated in the application. Motorola contests Dr. Nieh’s conclusions by

questioning whether the application included a description of the directory as a function of identification of software already installed on the station.

Ultimately, both experts presented evidence in support of their respective positions, and a jury would be free to credit the testimony of one expert over another. As such, a reasonable jury would have reason to credit the testimony of Dr. Nieh over that of Dr. von Herzen and find the claims valid under 35. U.S.C. § 112. Accordingly, the court denies Motorola's motion for judgement as a matter of law with respect to claims 151, 159, 162, 181, 189 and 192 of the '054 patent.

2. Non-infringement

Motorola argued at trial that Google Play, the accused product, does not infringe independent claim 181 and dependent claims 189 and 192 of the '054 patent. (D.I. 320 at 18) Mr. Ficus Kirkpatrick ("Mr. Kirkpatrick"), a software engineer at Google who worked on the development of Google Play, testified that the My Apps screen "shows you a list of everything you own, whether it has an update or not." (D.I. 337 at 1063:24-1064:3) He explained that Google Play actually displays this My Apps list by "us[ing] a piece of code in the Android system called a list view and it's just one big list view that takes up most of the screen." (*Id.* at 1064:7-11) Mr. Kirkpatrick noted that item one on the list is "updates," item two is Chrome browser, item three is "My Verizon Mobile" and item five is "Recently Updated." (*Id.* at 1075:10-22)

IV responded that the "My Apps directory is really three directories" in that a "[d]irectory can have directories within it." (D.I. 336 at 736:16-18) On direct examination, Dr. Nieh demonstrated how, when he went to the "directory of software updates," he found a header that says "updates" along with an indication of the number

of updates. (*Id.* at 692:4-14) Dr. Nieh discussed how that directory “doesn’t have . . . any updates that are already installed.”¹⁰ (*Id.* at 692:20-693:2) On cross-examination, Motorola’s expert, Dr. von Herzen, agreed that there are “several buckets” in the directory and that one particular bucket “would not have apps that are up to date.” (D.I. 338 at 1330:2-8)

The court previously construed “presenting a directory of software [updates] available for installation on the user station and not already installed on the user station” as “displaying a directory of software [updates] available for installation on the user station but not displaying any software [updates] already installed on the user station.” (D.I. 284 at 43) There is no dispute that if the “My Apps directory” is considered to be a single list, there is no infringement. The key point of contention is whether a part of the list can be called a directory as well.

The court may not make credibility determinations or weigh the evidence when deciding a motion for judgment as a matter of law.¹¹ See *Reeves*, 530 U.S. 133 at 150. Drawing all reasonable inferences in favor of IV, the court finds that a jury could credit the testimony of Dr. Nieh and properly determine that the “updates” directory is in fact a “directory” in its own right. Accordingly, the court denies Motorola’s motion for judgment as a matter of law of non-infringement of claims 181, 189 and 192 of the ‘054 patent.

¹⁰Dr. Nieh clarified that his demonstrative showing the already installed updates was really just a single screen shot of the entire My Apps directory. (D.I. 336 at 731:25-732:12)

¹¹The term “directory” was not specifically presented for claim construction and, therefore, left to be construed by the jury according to its ordinary meaning.